

## **REMARKS**

### **Status of the Claims**

Claims 34-42 and 62-76 remain pending herein.

Claims 34, 37 and 39 have been amended herein. Support for these amendments can be found, for example, in paragraphs [0002], [0011], [0066] and [0099]-[0101]. See also Example 7.

Hence no new matter has been added.

### **Claim Rejection under 35 U.S.C. 102**

Claims 34-42 and 62-76 are rejected under 35 U.S.C. 102(a) as being unpatentable over O'Hagan et al., WO 00/50006 (O'Hagan II). Applicant respectfully traverses this rejection and its supporting remarks.

For a reference to anticipate a claim it must disclose each and every element of the claim. See MPEP 2131 and cases cited therein, especially *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989) and *In re Marshall*, 578 F.2d 301, 304, 198 U.S.P.Q. 344, 346 (CCPA 1978).

As explained in the present specification in paragraphs [0011] *et seq.*, the inventors have unexpectedly found that adsorption of macromolecules to microparticles can be improved by ensuring that detergent is made available for forming a complex with the macromolecules at the time of adsorption.

In this regard, all presently pending claims concern methods that comprise adsorbing a biologically active macromolecule to microparticles in a microparticle composition wherein about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound.

O'Hagan II, however, does not teach or suggest a method in which macromolecules are adsorbed to microparticle compositions in which a particular percentage of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound. In fact, O'Hagan II describes washing and centrifugation. See, for instance, Examples 1-3, pp. 46-47 (washed with water by centrifugation four times). As indicated in the present specification, such washing steps remove essentially all unbound detergent, resulting in a final product in which greater than 99% of the remaining detergent is bound to the particles.

In this regard, as discussed in more detail below, it is not at all obvious to retain detergent in unbound form as claimed. In fact, as indicated in Singh et al. *infra* there is strong incentive to keep the detergent levels to a minimum (e.g., by a method such as centrifugation with washing).

In addition to the above-described adsorption step, all presently pending claims require either (I) that the microparticles are subjected to a filtration step such that a particular percentage (i.e., about 10-90%, 10-60% or 25-40%) of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound or (II) that the microparticles are not subjected to a washing step and the ratio of the detergent to the polymer used is such that a particular percentage (i.e., about 10-90%, 10-60% or 25-40%) of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound.

With respect to limitation (II) above, which requires the absence of a washing step, it is again noted that O'Hagan II describes washing and centrifugation. See, for instance, Examples 1-3, pp. 46-47 (washed with water by centrifugation four times). As indicated in the present specification, such washing steps remove essentially all unbound detergent, resulting in a final product in which greater than 99% of the remaining detergent is bound to the particles.

With respect to limitation (I) above, the only discussion of a filtration step in O'Hagan II pertains to a size exclusion step in which microparticles are filtered through a 38  $\mu$ m mesh (which would have no effect on the relative amount of bound and unbound detergent)—and this step is immediately followed by washing with water by centrifugation four times. See Examples 2, 3 and 27. Thus, O'Hagan II does not teach or suggest a filtration step like that claimed (i.e., a filtration step that results in a particular percentage of the total detergent in the microparticle composition being bound to the microparticles and the remainder being unbound).

This is even more clearly apparent with respect to the cross-flow filtration step claimed in claim 36. In this regard, as seen in the introductory materials previously attached to Applicant's Office Action response dated May 1, 2006, cross-flow filtration (CFF), also known as Tangential Flow Filtration (TFF), is a process wherein a feed stream passes parallel to a membrane face, with a portion of the stream passing through the membrane (permeate) while the remainder (retentate) is recirculated back to a feed reservoir. An advantage of cross-flow filtration is that smaller species (e.g., detergent) can be separated from a larger species (e.g., microparticles). Cross-flow filtration is also advantageous in that one can conduct diafiltration, a fractionation process that washes smaller species through a membrane and leaves larger species in the retentate without

ultimately changing the concentration of the larger species. Diafiltration allows, for example, unbound detergent to be replaced by a second detergent while maintaining the ratio of bound and unbound detergent. For instance, continuous diafiltration may be employed wherein a diafiltration solution (e.g., a solution of a second detergent) is added to the feed reservoir at the same rate as permeate is generated. In this way the volume in the sample reservoir remains constant, while the unbound first detergent is gradually exchanged for the second detergent.

In the filtration step as described in O'Hagan II, on the other hand, microparticles are recovered via a size exclusion step using a 38  $\mu\text{m}$  mesh. Unlike a cross-flow filtration membrane, which allows the amount of unbound detergent to be carefully controlled, a 38  $\mu\text{m}$  mesh would provide essentially no control over the amount of unbound detergent (because the detergent would freely flow through such a mesh along with its associated solution).

The Examiner has noted that the filtration step does not exclude a washing step, since the comprising claim language of the method is open. While this is true, it is also true that the claims affirmatively require either (a) that the microparticles are not subjected to a washing step, which is not taught by O'Hagan II or (b) that the microparticles are subjected to a filtration step that results in a particular percentage of the total detergent in the microparticle composition being bound to the microparticles and the remainder being unbound (i.e., about 10-90%, 10-60% or 25-40%), which is also not taught by O'Hagan II. Moreover, the addition of a washing step would likely remove the free detergent, in which case step (c) as now amended in the claims would not be met.

For at least the above reasons, it is respectfully submitted that O'Hagan II does not support a *prima facie* case of obviousness against claims 34-44 and 62-76. Reconsideration and withdrawal of the rejection of these claims over O'Hagan II are respectfully requested.

**Claim Rejection under 35 U.S.C. 103-Levy in view of Paliard**

Claims 34-42 and 62-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,395,253 to Levy et al. (Levy) in view of US 6,562,346 to Paliard et al. (Paliard). Applicant respectfully traverses this rejection and its supporting remarks.

"To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed

invention to have been obvious in light of the teachings of the references." MPEP 706.02(j), quoting *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

All claims require processes whereby macromolecules are adsorbed to microparticle compositions containing bound and unbound detergent. Levy, on the other hand, does not teach or suggest adsorption to microparticles, but rather is directed to improved methods for *incorporating* nucleic acids *into* polymeric microspheres and/or nanospheres (micro-encapsulation) through the use of a condensing agent. See, e.g., Abstract. See also the title of Levy: *Microspheres Containing Condensed Polyanionic Bioactive Agents and Methods for Their Production*.

See further the generic microsphere preparation method in Levy, Section 4.2, which states that the microspheres formed contain the bioactive agent:

In the standard embodiment ... at least one biocompatible biodegradable polymer is dissolved in a water-immiscible organic solvent to yield an organic phase. The hydrophilic bioactive agent [nucleic acid] is dissolved in water to yield a first aqueous phase, and the two phases are then emulsified to yield a water-in-oil (W/O) emulsion. A second aqueous phase is then formed... The W/O emulsion and the second aqueous phase are again emulsified to yield a double water-in-oil-in-water (W/O/W) emulsion. The organic solvent is then removed from the W/O/W emulsion, *yielding microspheres containing the hydrophilic bioactive agent...*

In contrast, in all presently pending claims, after removing the organic solvent from the emulsion to form microparticles in step (b), a biologically active macromolecule is *adsorbed* in step (c) to microparticles in a microparticle composition in which about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound.

Thus the teachings of Levy are not relevant to the pending claims and do not include the elements of the pending claims.

The Examiner has responded by indicating that the rejection is one in which the claimed process is rendered obvious by the method of Levy and that "selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results."

In response, Applicant recognizes that unexpected results can, of course, be used to overcome a *prima facie* case of obviousness. See, e.g., MPEP 716.02(a)-(g). Here, however, Applicant is arguing that a proper *prima facie* case has not been made out by the Examiner. Applicant is unaware of any legal authority supporting the notion that "selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results" and

to the extent that the Examiner may be aware of such authority, Applicant respectfully requests that she provide Applicant with a citation of the same.

The presently pending claims are *method* claims in which a biologically active macromolecule is *adsorbed* to a previously formed microparticle composition containing bound and unbound detergent. In the method of Levy, on the other hand, the macromolecule (DNA) is positioned in the inner phase of a double water-in-oil-in-water (W/O/W) emulsion. Organic solvent is then removed from the W/O/W emulsion, yielding microspheres that contain the encapsulated macromolecule. Thus, the macromolecule is introduced to the Levy composition prior to microparticle formation, whereas in the present invention it is introduced after microparticle formation. Moreover, the macromolecule is encapsulated in the Levy microparticles, whereas in the present invention it is adsorbed to the microparticles.

Furthermore, as noted above, all presently pending independent claims concern microparticle compositions in which macromolecules are adsorbed to microparticles in a microparticle composition in which about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound. As explained in the present specification at paragraph [0011] onwards, the inventors have unexpectedly found that adsorption of macromolecules to microparticles can be improved by ensuring that detergent is made available for forming a complex with the macromolecules at the time of adsorption. This feature of the invention is neither taught nor suggested by Levy.

The Examiner has responded by urging that (a) the binding of the detergent inherently happens in Levy when the emulsion is formed and (b) the claims do not recite any specific amounts of detergent used in the preparation of the microparticle composition. With regard to point (a), Applicant is not simply claiming a microparticle composition that contains bound detergent, but rather is claiming a composition in which about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound.

With regard to point (b), it is true that the precise amount of detergent used in the preparation of the microparticle composition is not claimed. However, the amount of detergent used is such that a composition is created in which about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound.

In this regard, the Examiner further alleges that the silence in the claims regarding the initial amount of detergent "suggests that any amount of detergent would lead to an amount of detergent

bound to the microparticles.” This is clearly not the case. For example, in some embodiments, excess unbound detergent is removed by cross-flow filtration to achieve the claimed amounts of bound and unbound detergent. In other embodiments, a sufficiently small detergent-to-polymer ratio is used, such that it is not necessary to wash or otherwise treat the microparticles (e.g., by filtration) to remove excessive amounts of unbound detergent. See, e.g., paragraph [00098] of the present specification.

Regardless, Levy does not teach or suggest adsorbing a biologically active macromolecule to microparticles within a microparticle composition in which about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound. In fact, Levy does not teach adsorbing a biologically active macromolecule to microparticles at all.

Applicant had previously provided reasons why the Levy microparticle compositions would not contain the claimed amounts of bound and unbound detergent. In this regard, it was noted that absent a reason to ensure that unbound detergent remains in the microparticles, one of ordinary skill would be motivated to wash the microparticles of excess detergent by centrifugation as taught by Levy. Applicant had also cited Singh et al., *Proc. Natl. Acad. Sci. USA*, 2000, 97:811-816 (of record—see the IDS filed 2/10/04), page 815, right column, third paragraph, as showing that there is motivation in the art to keep detergent levels, particularly cationic detergent levels, to a minimum.

The Examiner has disagreed with applicant's reasoning for motivation to wash the microparticle as per Singh et al., because Singh et al. has not been used in the rejection. Singh et al., however, does not have to be used in the rejection in order for Applicant to use the reference as evidence of the motivations of those of ordinary skill in the art.

Regarding the Examiner's inherency rejection, Applicant had previously noted that Levy *must* provide the claimed amounts of bound and unbound detergent:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic...."To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' "...

MPEP 2112.IV (emphasis in original) (citations omitted). The Examiner has responded using several lines of argument, which are respectfully traversed by the Applicant.

Moreover, even assuming solely for the sake of argument that, at some point in the process described by Levy, a microparticle composition exists in which about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound, Levy nonetheless does not provide the basis for a proper *prima facie* rejection. This is true at least because the presently pending claims are *method* claims in which, after removing the organic solvent from the emulsion to form microparticles in step (b), a biologically active macromolecule is adsorbed to those microparticles in step (c). Thus, in the present invention the macromolecule is introduced *after* microparticle formation, whereas in Levy the macromolecule is introduced *prior to* microparticle formation (as the inner phase of a W/O/W emulsion). Moreover, the macromolecule in the present invention is *adsorbed* to the microparticles, whereas the macromolecule in Levy is *encapsulated* in the microparticles. Levy cannot possibly be said to teach or suggest adsorbing a biologically active macromolecule to microparticles in a microparticle composition in which about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound, at least because Levy does not teach adsorbing a biologically active macromolecule to microparticles at all.

Moreover, certain of the pending claims require the microparticles to be subjected to a filtration step such that a particular percentage of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound. Levy does not teach a filtration step.

The Examiner has taken the position that filtration “appears to be equivalent to washing” and that, consequently, the filtration steps of claims 34 and 36 reads on the wash step of one of the embodiments of Levy at col. 13, line 5 (microspheres washed one or more times with water, Tris-EDTA, etc.), at col. 18, line 42 (washed three times with Tris-EDTA) and at col. 20, line 2 (this section reads on washing *cells*, rather than microspheres).

The Hawley’s Condensed Dictionary entry previously cited by Applicant describes “filtration” as “[t]he operation of separating suspended solids from a liquid (or gas) by forcing the mixture through a porous barrier ...” The Examiner has focused on the first part of the definition (separating suspended solids from a liquid) in an attempt to have “filtration” read on the centrifugation step of Levy. However, because “filtration” further requires the use of a porous barrier (i.e., a *filter*), filtration is neither taught nor suggested by the washing steps Levy. Among

other requirements, to establish a *prima facie* case of obviousness, the prior art references must teach or suggest all the limitations of the claims.

The Examiner further argues that there is no demonstration in Applicant's specification that not subjecting microparticles to a washing step or subjecting them to a cross-filtration step provides unusual/unexpected properties. Applicant disagrees.

As explained in the present specification at paragraph [0011] onwards, the inventors have found that adsorption of macromolecules to microparticles can be unexpectedly improved by ensuring that detergent is made available for forming a complex with the macromolecules at the time of adsorption. This availability can be accomplished in several ways, including filtration and the avoidance of a washing step.

With regard to SDS (an anionic detergent), as previously noted, it is true that Levy discloses 0.1% SDS in Section 5.3.2. However, Levy's use of SDS occurred *after* formation of DNA containing microspheres. In particular, at column 19, lines 8-10, Levy specifically teaches incubating DNA-containing microspheres in excess TE buffer with and without 0.1% SDS. At column 19, lines 11-13, Levy discloses that SDS was used to establish that charge-related associations between poly-L-lysine and DNA contribute to the DNA release and/or extraction mechanism. Thus, in Section 5.3.2, the SDS is used as an *analytical reagent* to assess previously formed microspheres.

The Examiner has responded by urging that even though the SDS was added after the formation of DNA containing microspheres (as an analytical reagent), "selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results." As previously noted, Applicant is unaware of any legal authority supporting this notion and, to the extent that the Examiner is aware of such authority, Applicant respectfully requests that she provide Applicant with the same.

The Examiner also points to column 12, lines 47-54 of Levy, which "teaches the use of emulsifying agents such as SDS [*sic*, SLS], TWEEN, etc. in an emulsion that contains PLG." However, it is again noted that that it is not at all obvious from Levy to retain detergent in unbound form as claimed.

Indeed, as indicated in Singh et al. *supra* (page 815, right column, third paragraph) there is strong incentive to keep the detergent levels to a minimum (e.g., by a method such as centrifugation with washing). The Examiner has responded that keeping the levels of detergent to



a minimum is relative, because only the relative amounts of bound (10-90%) and unbound (90-10%) detergent are claimed, and the total amount of the detergent is not claimed. However, by a "minimum," Applicant means that the amount of unbound detergent should be removed to the degree possible, for example, using a technique such as that described in Levy, wherein the particles are washed multiple times with water. As indicated in paragraph [0011] of the present specification, such washing steps remove essentially all unbound detergent, resulting in a final product in which greater than 99% of the remaining detergent is bound to the particles.

For at least the above reasons, it is respectfully submitted that Levy does not support a *prima facie* case of obviousness against claims 34-44 and 58-76.

With respect to Paliard, this reference is cited for its disclosure of CTAB detergent, claimed in claims 38 and 40. Paliard, however, does not make up for the above noted deficiencies in Levy.

Moreover, it is noted that the present application is a Division of Serial No. 09/967,462, filed 09-28-2001, which claims priority from Provisional Application Serial No. 60/236,077, filed 09-28-2000. Thus, Paliard falls within the confines of 35 U.S.C. § 102(e).

It is further noted that the assignee of Paliard and the assignee of the present application are one and the same. 35 U.S.C. § 103(c) reads as follows: "Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

#### **Statement concerning common ownership**

In compliance with M.P.E.P. 706.02(I)(2), it is submitted that the present Application No. 10/775,964 and U.S. Patent No. 6,562,346 to Paliard et al. were, at the time the claimed invention of Application No. 10/775,964 was made, both owned by the same person or subject to an obligation of assignment to the same person.

Consequently, the subject matter of Paliard does not preclude patentability under 35 U.S.C. 103(a).

Finally, as explained in the present specification at paragraph [0011] onwards, the inventors have found that adsorption of macromolecules to microparticles can be improved by ensuring that detergent is made available for forming a complex with the macromolecules at the time of adsorption. Such a result is entirely unexpected in view of the prior art and constitutes objective evidence of the non-obviousness of the claimed invention. *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966).

The Applicant also provides comparative data showing unexpected results. For example, Example 4 discloses the results of loading p55 DNA onto washed PLG-CTAB microparticles. The theoretical load was 1%, whereas the actual load was 0.91%, or a loading efficiency of 91%. By contrast, Example 7 discloses results of loading p55 DNA onto non-washed PLG-CTAB microparticles prepared in Example 6. The theoretical load was 1%, whereas the actual load was about 1%, or a loading efficiency of about 100%.

This is especially surprising, because one of ordinary skill in the art would have expected that the unbound CTAB detergent would, if anything, interfere with DNA loading. More particularly, the positive charge of the unbound CTAB would be expected to associate with the negatively charged backbone of the DNA. This, in turn, would be expected to shield the overall negative charge of the DNA, such that it would be less attracted to the positively charged CTAB that is bound to the microparticles. Contrary to that expectation, the presence of unbound CTAB actually increases loading efficiency. Washing away the unbound CTAB, on the other hand, does *not* improve loading efficiency, but actually reduces loading efficiency.

For at least the above reasons, withdrawal of the rejection of the claims over Levy in view of Paliard is requested.

#### **Claim Rejection under 35 U.S.C. 103-O'Hagan**

Claims 34, 35, 36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,086,901 to O'Hagan et al. (O'Hagan). Applicant respectfully traverses this rejection and its supporting remarks.

As explained in the present specification at paragraph [0011] onwards, the inventors have unexpectedly found that adsorption of macromolecules to microparticles can be improved by ensuring that detergent is made available for forming a complex with the macromolecules at the time of adsorption.

In this regard, all presently pending claims concern methods that comprise adsorbing a biologically active macromolecule to microparticles in a microparticle composition, wherein about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound. O'Hagan does not teach or suggest such an adsorption step.

Rather, O'Hagan describes washing and centrifugation. See, for instance, Example 1, col. 14, lines 62-63 (washed three times using centrifugation) and Example 3, col. 16, lines 3-4 (also washed three times using centrifugation). As noted in paragraph [0011] of the present specification, techniques in which microparticles are washed multiple times with water, such as the process of O'Hagan, remove essentially all unbound detergent, resulting in a final product in which greater than 99% of the remaining detergent is bound to the particles. Thus, O'Hagan does not teach or suggest a process in which a biologically active macromolecule is adsorbed to microparticles in a microparticle composition, wherein about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound.

The Examiner has responded by arguing that the claims recite a filtration process by which one of ordinary skill in the art can produce microparticle compositions with bound and unbound detergent as claimed. Moreover, the Examiner urges that because claim 34(b) requires a filtration step or method that does not require a washing step, the filtration step does not exclude a wash step in view of the open comprising language. Applicant's point, however, is not that the claimed filtration step excludes a washing step, but rather that the washing step preformed by O'Hagan would not yield a microparticle composition wherein about 10-90% of the total detergent in the microparticle composition is bound to the microparticles and the remainder is unbound.

The Examiner further urges that O'Hagan's filtration of a composition containing particles and detergent would also provide bound and unbound detergent in the amounts claimed. In this regard, as with O'Hagan II *supra*, the filtration step in O'Hagan pertains to a size exclusion step in which microparticles are filtered through a 38  $\mu$ m mesh (which would have no effect on the relative amounts of bound and unbound detergent)—and this step is immediately followed by washing with water by centrifugation three times. See Example 1. Thus, O'Hagan does not teach or suggest a filtration step like that claimed (i.e., a filtration step that results in a particular percentage of the total detergent in the microparticle composition being bound to the microparticles and the remainder being unbound).

As noted above, it is not at all obvious to retain detergent in unbound form as claimed. Indeed, as indicated in Singh et al. *supra* there is strong incentive to keep the detergent levels to a minimum (e.g., by a method such as centrifugation with washing).

Patentability is even clearer with respect to the cross-flow filtration step claimed in claim 36. In this regard, the Examiner has argued that the process of claim 36 “reads on washing because in the cross-flow filtration process, 4 liters of deionized water (Example 5) are used and the removal of the water appears to approximate the process of filtration/washing.” However, claim 36 is clearly patentable over O’Hagan, because it involves a particular type of filtration step, which is neither taught nor suggested by O’Hagan.

The Examiner again argues that the selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results. As previously noted, Applicant is unaware of any legal authority supporting this notion and, to the extent that the Examiner is aware of such authority, Applicant respectfully requests that she provide Applicant with the same.

The Examiner has correctly noted that claim 42 is a product by process claim. Nonetheless, claim 42 is unobvious over O’Hagan, because O’Hagan neither teaches nor suggests a method which produces a microparticle composition in which biologically active macromolecules are adsorbed to microparticles and which contains the amounts of bound and unbound detergent claimed.

For at least the above reasons, it is respectfully submitted that O’Hagan does not support a *prima facie* case of obviousness against claims 34-36 and 42.

Finally, as discussed in more detail above, the inventors have found that adsorption of macromolecules to microparticles can be improved by ensuring that detergent is made available for forming a complex with the macromolecules at the time of adsorption. Such a result is entirely unexpected in view of the prior art and constitutes objective evidence of the non-obviousness of the claimed invention. *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966).

For at least the above reasons, withdrawal of the rejection of the claims under 35 USC 103 over O’Hagan is requested.

## **CONCLUSION**

Applicants submit that the claims of the present invention are in condition for allowance, early notification of which is earnestly solicited. Should the Examiner be of the view that an

interview would expedite consideration of this Amendment or of the application at large, request is made that the Examiner telephone the Applicant's attorney at (703) 433-0510 to resolve any outstanding issues.

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